



TRANSPORTATION DATA SYMPOSIUM

Florida's Mobility Performance Measures Program



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Mobility Performance Measures

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Presentation



Introduction to mobility



MAP-21 requirements



Consensus document

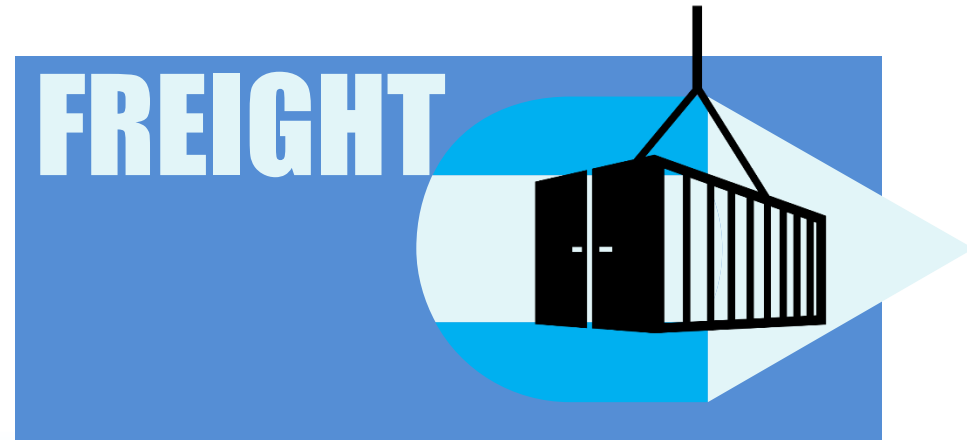
Recommended measures
Roles and responsibilities
Definitions



Recent activities / future directions



Importance of Mobility



“Providing **mobility** for people and goods is transportation’s most essential function.”

Mobility performance measures



**MAKE
SENSE**

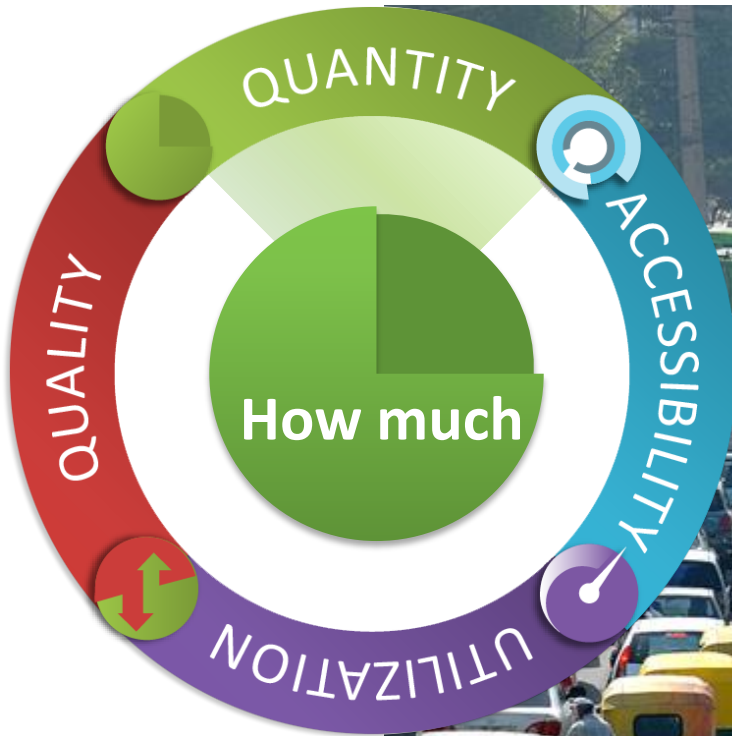


Dimensions of Mobility

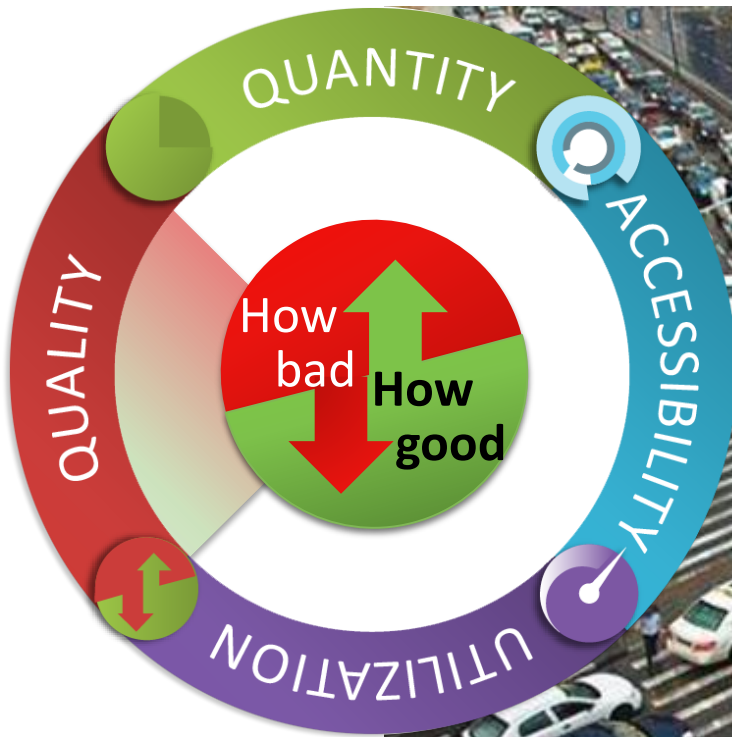


To adequately address mobility,
all four dimensions
should be emphasized
and **multiple**
performance measures used.

Quantity



Quality



Accessibility



Capacity Utilization





Applicability to All Modes

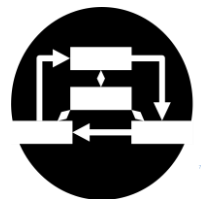




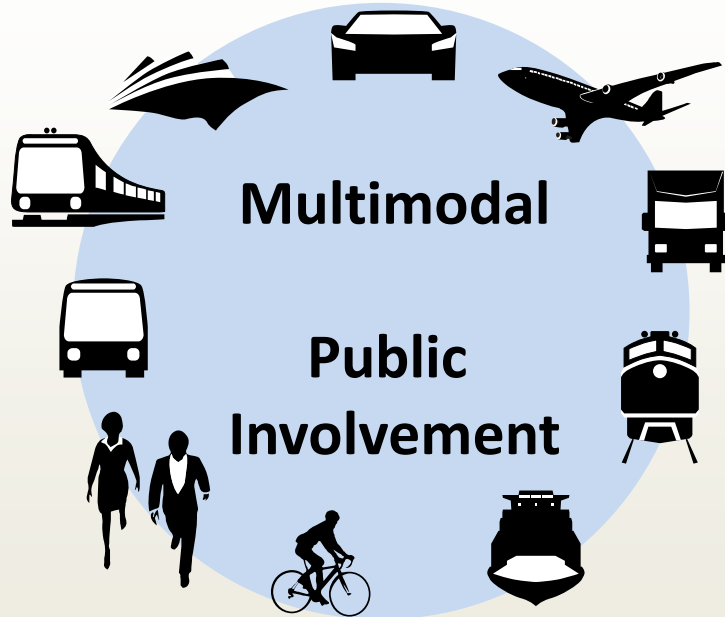
MAP-21 Requirements



USDOT wants States and MPOs
to do performance based planning



ISTEA/TEA-21



MAP 21

Moving Ahead for Progress in the 21st Century





Florida DOT's Perspective

"FDOT is committed to being leaders and innovators in this vitally important area of transportation management"

Get out in front

"We track progress toward meeting our own goals"

Positive



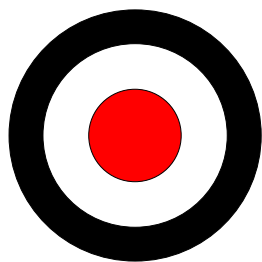
Jim Boxold
FDOT Secretaries
Ananth Prasad



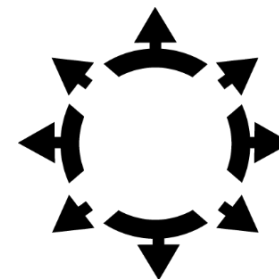
Supportive



FDOT Performance Policy



**CORE
MEASURES**



Core/Supporting
Measures

Performance
Management

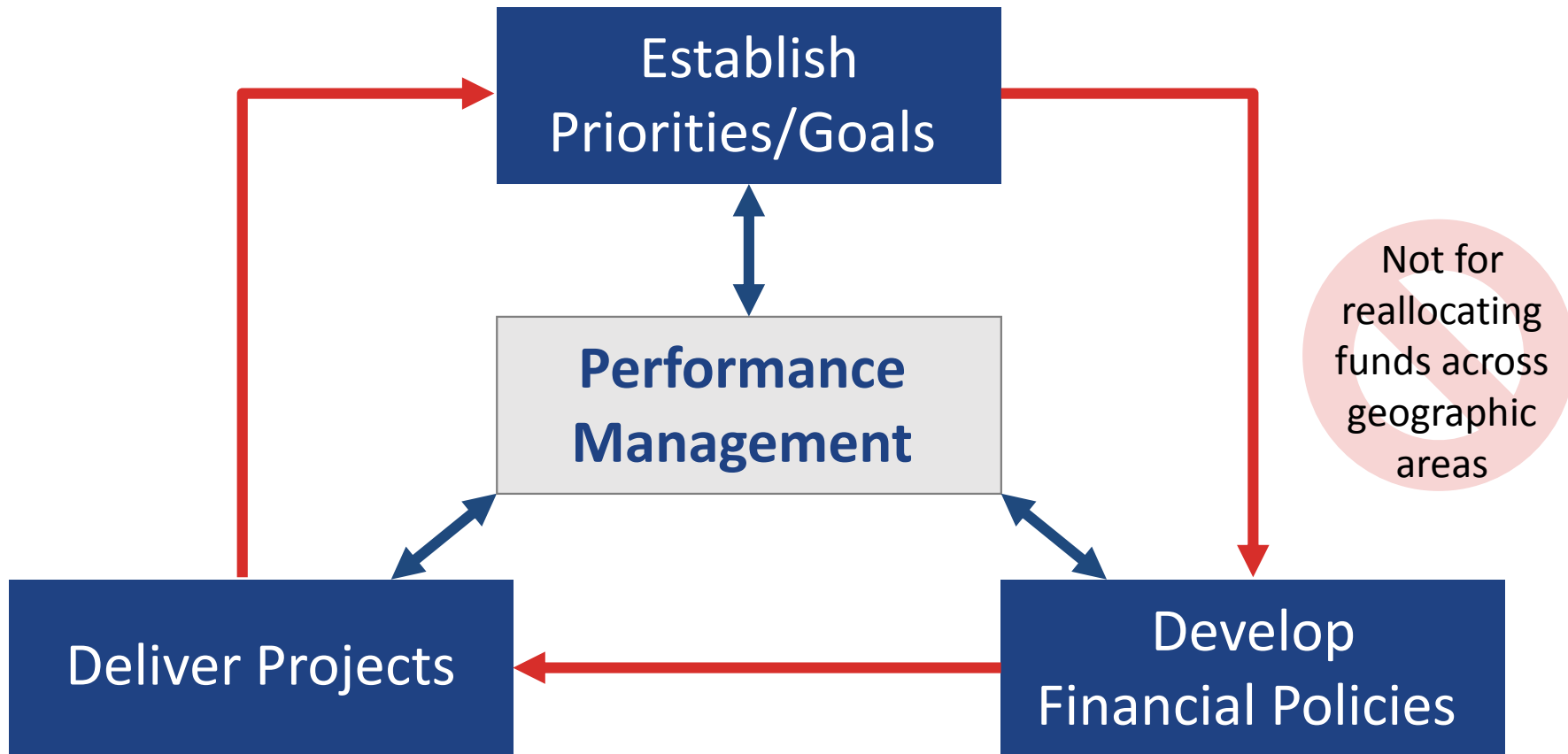
Collaborating &
Communicating



Effective: December 22, 2014



Use of Performance Measures

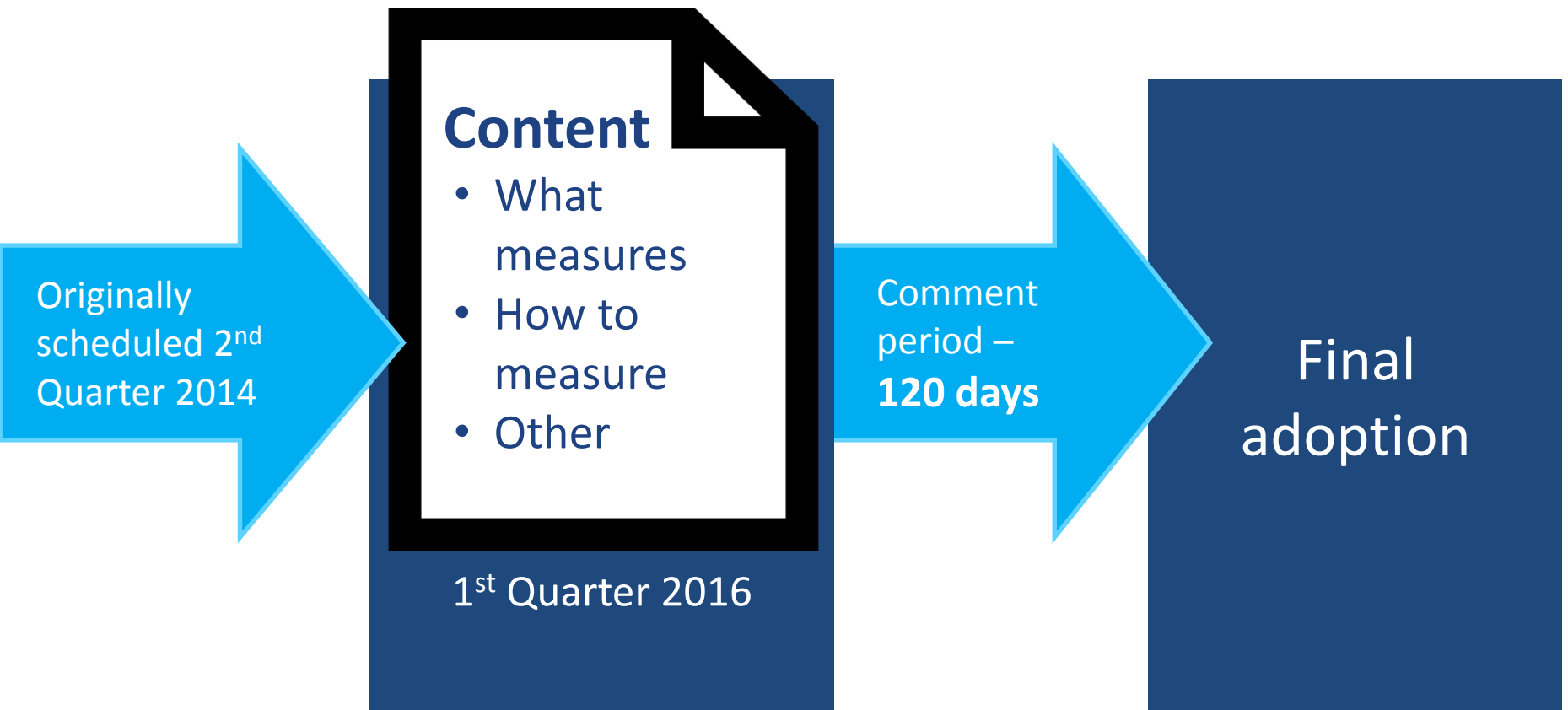


Application of performance management principles to transportation system policy and investment decisions



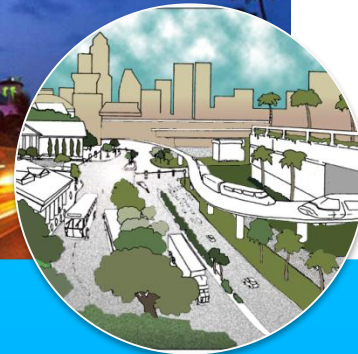
MAP-21 Performance Measures Timing

Notice of proposed rule making

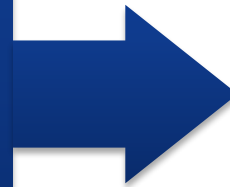


Performance Targets

URBANIZED AREAS



States will set targets
within 1 year after the final rule



MPOs will set targets
within 180 days after
States set their targets



Statewide Mobility Performance Measures Team Purpose

To provide guidance and support to FDOT and the state's MPOs on multimodal mobility performance measures including reporting for internal and MAP-21 purposes

Consensus in approach and measures



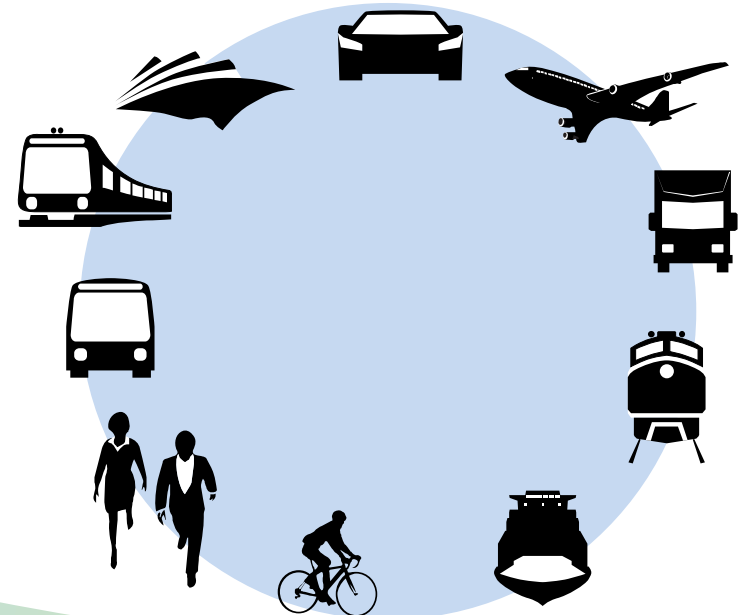
Others



Consensus in approach and measures

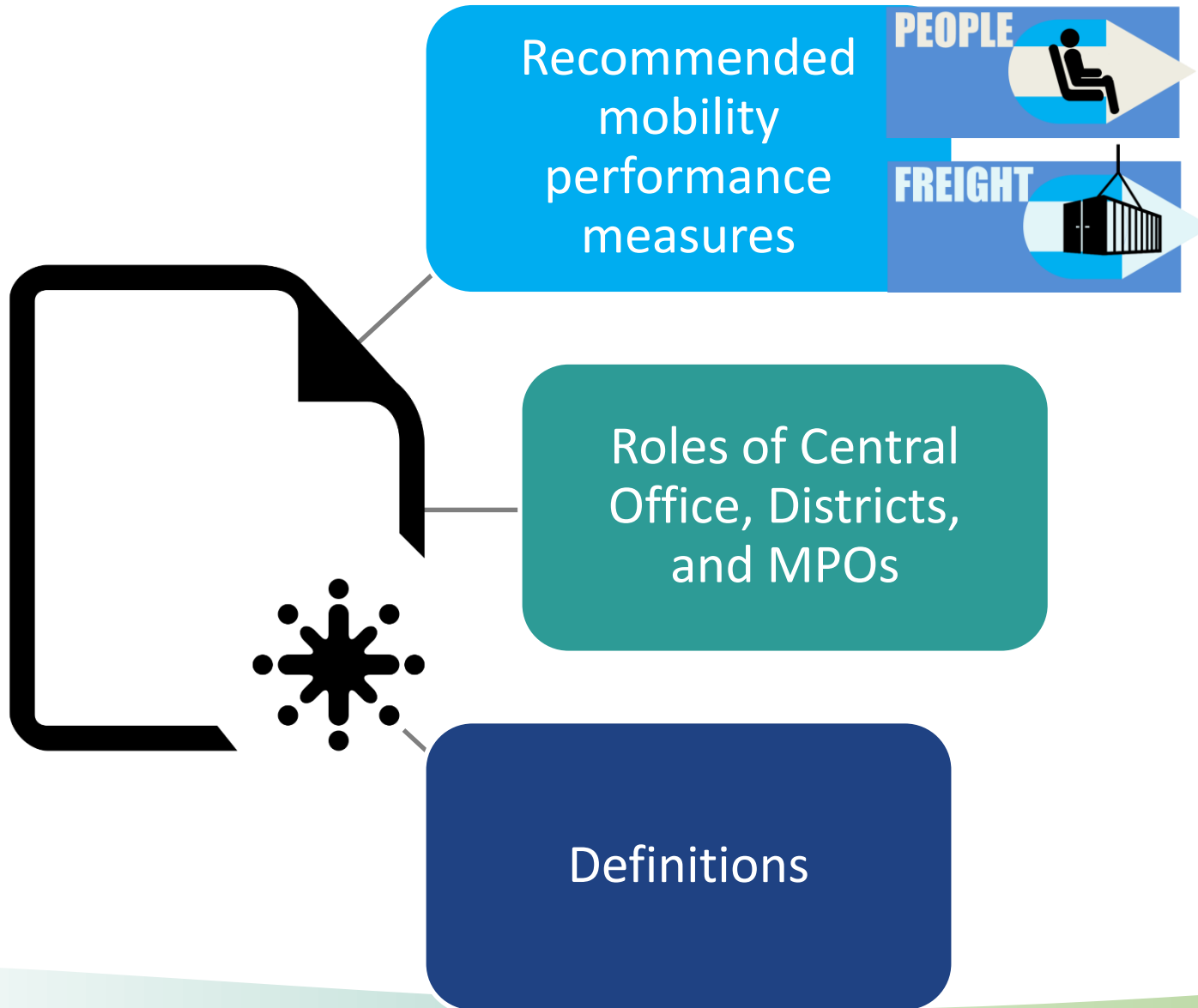


Modal Office Coordination Team





MPM Consensus Document





	MODE	QUANTITY	QUALITY	ACCESSIBILITY	UTILIZATION
PEOPLE	Auto/Truck 	Vehicle Miles Traveled	% Travel Meeting LOS Criteria % Miles Meeting LOS Criteria Travel Time Reliability Travel Time Variability Vehicle Hours of Delay Person Hours of Delay		% Miles Severely Congested % Travel Severely Congested Hours Severely Congested Vehicles Per Lane Mile
	Transit 	Person Miles Traveled Passenger Miles Traveled Passenger Trips	Average Travel Speed		Vehicles Per Lane Mile
	Pedestrian 		Level of Service (LOS)	% Sidewalk Coverage	
	Bicycle 		Level of Service (LOS)	% Bike Lane/Shoulder Coverage	
	Aviation 	Passengers	Departure Reliability	Highway Adequacy (LOS)	Demand to Capacity Ratios
	Rail 	Passengers	Departure Reliability		
	Seaports 	Passengers		Highway Adequacy (LOS)	
FREIGHT	Truck 	Combination Truck Miles Traveled Truck Miles Traveled Combination Truck Tonnage Combination Truck Ton Miles Traveled	Travel Time Reliability Travel Time Variability Combination Truck Hours of Delay Combination Truck Average Travel Speed		% Miles Severely Congested Vehicles Per Lane Mile Combination Truck Backhaul Tonnage
	Aviation 	Tonnage		Highway Adequacy (LOS)	
	Rail 	Tonnage		Highway Adequacy (LOS) Active Rail Access	
	Seaports 	Tonnage		Highway Adequacy (LOS)	
		Twenty-Foot Equivalent Units		Active Rail Access	



Mobility Performance Measures Reporting



<http://www.dot.state.fl.us/planning/statistics/sourcebook/>



FDOT Central Office Roles:

Central
Office

District
Office

MPO

Coordinate statewide efforts on MPM Program

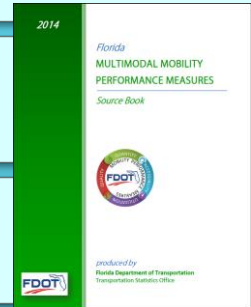
Produce and report on statewide MAP-21 measures

Produce annual TranStat Source Book

Provide additional MPMs

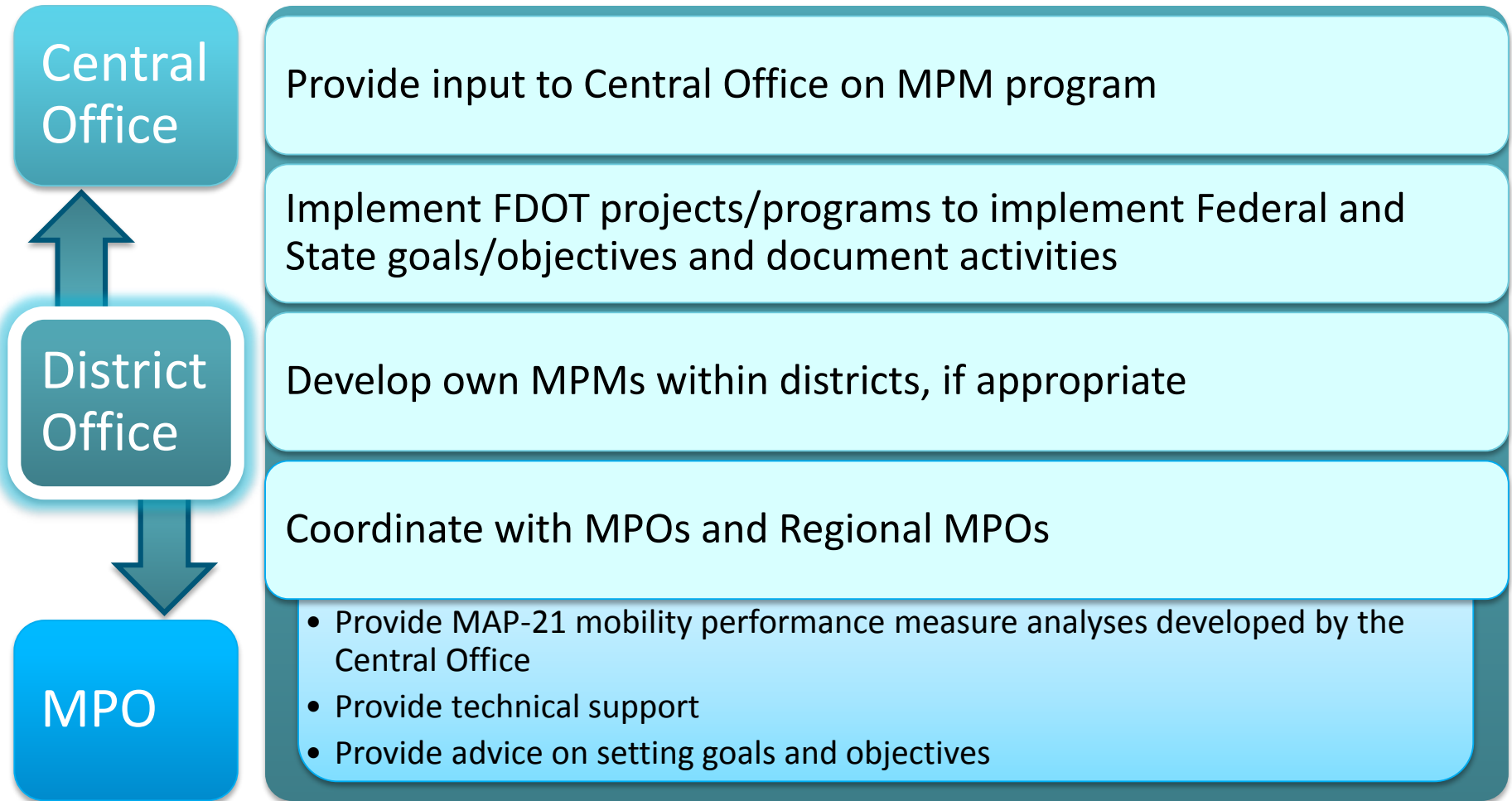
Lead development of targets and support MPOs

Develop and provide training in 2015





FDOT District Offices Roles:





MPOs Roles:



- Comply with MAP-21
 - Use calculated results provided by FDOT, if desired
 - Report to FHWA as required
 - Develop performance targets
 - Include in LRTPs and Congestion Management Plans to evaluate alternatives, programming/prioritization of projects
- Develop own MPMs, if appropriate
- Coordination with other MPOs, if appropriate



FDOT TranStat's Intent

FDOT will provide
an analysis of
all required
MAP-21 mobility
performance **measures**

- For the **state** as a whole

not by Districts

- Each **MPO**

has the option to
use or not



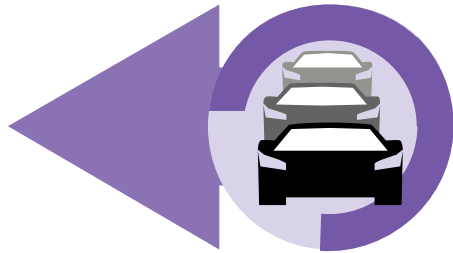
Comparable measurements
for road networks

- MAP-21 networks
- State Highway System

Areawide groupings

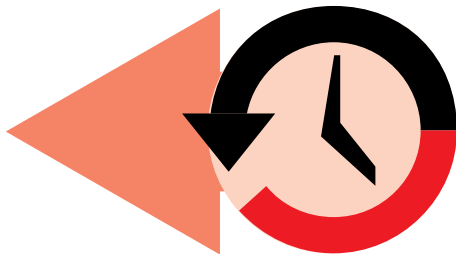
- Urbanized boundaries
- Planning boundaries
- County boundaries
- Regional boundaries

A Few Key Definitions



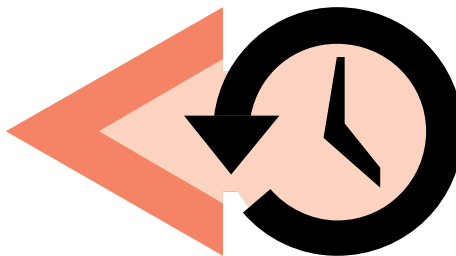
Congestion

– Mild, heavy, severe



Delay

– Threshold, total



Travel Time Reliability

– On-time performance,
travel time variability

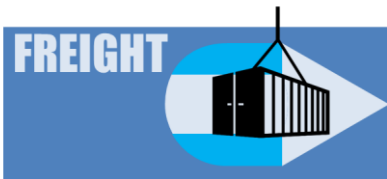


Noteworthy Non-MAP-21 Topics



Pedestrian and bicycle measures

- Inventory of facilities (accessibility)
- Level of service (quality)
- Counts (quantity)



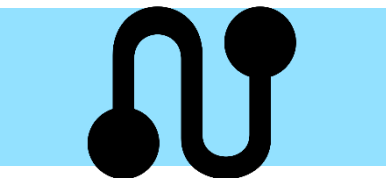
Freight multimodal

- Aviation, rail, seaports



Geographic limits

- Urbanized, planning, county, aggregated



Roadway systems

- National, state, modeled network



Recent Activities /Future Directions

Website

Use of vehicle probe data

Outreach/training

Pedestrian / bicycle activities

Consistency with FDOT's Annual Performance Report

Target setting

Common source of data to MPOs



MPM Website

floridampms.com



Mobility Performance Measures Program **Joint Statewide Initiative**

[Home](#)[Program
Information](#)[MPM Source Book](#)[Meetings, Members,
Materials](#)[Work Products](#)[Contact](#)

Florida's Mobility Performance Measures

Use of Vehicle Probe Data

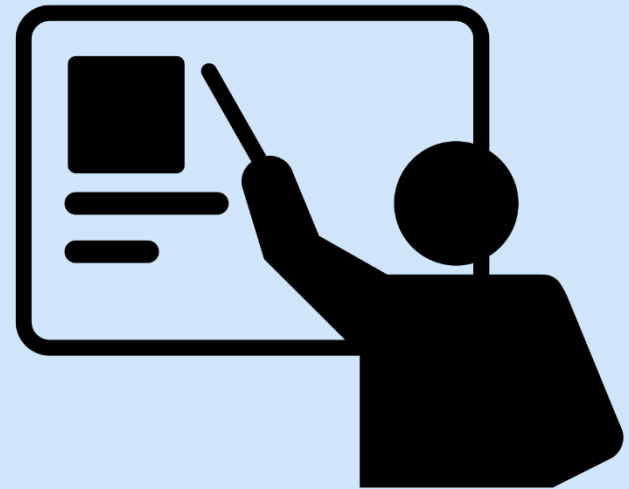


Outreach

Outreach

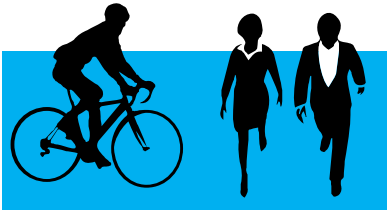
- Website
- District/MPO visits / coordination
- Project sheets

Training Plan





Pedestrian / Bicycle Activities



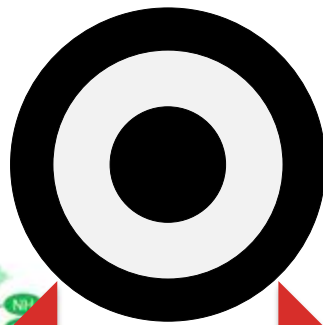
Inventory

Levels of Service

Lane elimination (road diet) handbook/research



Performance Targets



Desire for
Coordination



States and MPOs must integrate
performance plans into a performance-based process



Target Setting Meetings (Workshops)

Purposes

- Context
- Approach
- Method to select targets



General

Locations: Fort Lauderdale, Ocala

Timing: May, 2015

Representation

11 MPOs

3 Districts

Central Office



Meeting Objectives

- Develop a **common frame** of reference for discussion mobility targets in Florida
- **Improve understanding** of Federal process and progress on system performance NPRM
- Identify desired approach for **engaging stakeholders** in target-setting process
- Identify needs for **data**, analytical methods
- Identify preferred methods for specifying and selecting **targets**
- **Build support** for statewide implementation



Common Target Setting Methods

Policy

- Based on policy objectives
- What can be achieved based on plans and funding

Feedback

- Consensus-based process, driven by baseline data and trend projection
- User/customer surveys, informal customer feedback
- Peer-agency benchmarks

Analysis

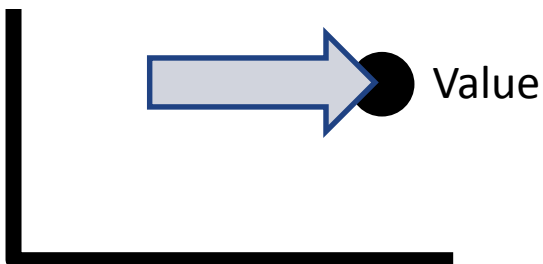
- Scenario analysis, financially-constrained testing
- Demand forecasting, land use modeling, economic analysis



Options for Specifying Targets

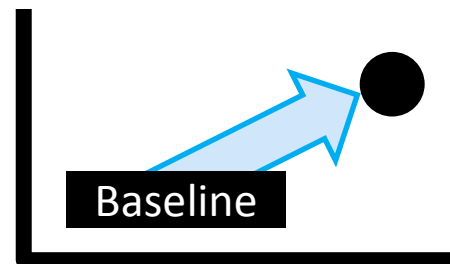
Absolute value target:

- *Maintain Travel Time Index of 1.4 or less*
- *Maintain delay at or below X hours*
- *95% of VMT at or above target speed or LOS*



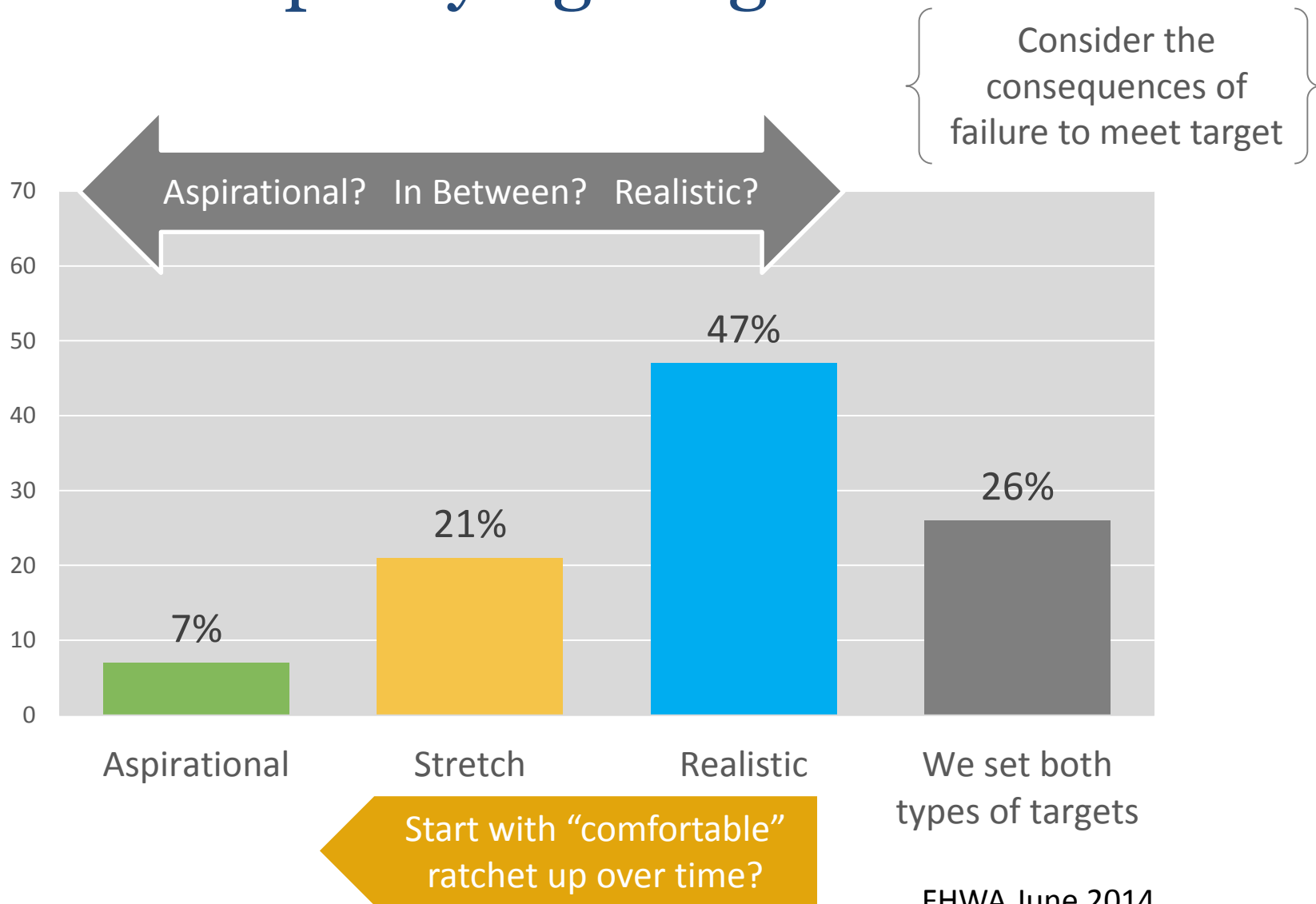
Change relative to baseline conditions:

- *Achieve 10% reduction in VMT under congestion*
- *Achieve 10% increase in non-auto mode share*





Specifying Targets



FHWA June 2014



Geographic Context

Link target values to geographic context



Multimodal vs. vehicle-dominated corridors

Entire jurisdictions vs. partitions

More dense vs. less dense areas

Urban vs. non-urban

All, or just some of the targets in an area



Duration or Time Horizon of Targets

Short, intermediate, long-term all appropriate, depending on application





Economic Activity

Link the target value to correlated measures of economic activity

- Gross regional product, employment, etc.
- Recognizes that growth in economic activity likely to generate more VMT, Ton-Miles of freight
- Provides a “relief valve” in overheated economy
- Also may inspire “making up lost ground” during slowdown

Policy implications are many...



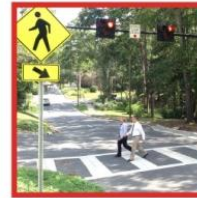


Consistency with FDOT's Annual Performance Report

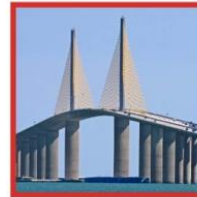
FLORIDA DEPARTMENT OF TRANSPORTATION



2014 PERFORMANCE REPORT



Safety & Security



Maintenance &
Operation



Mobility & Economic
Competitiveness



Quality of Life &
Environmental
Stewardship



Core Measures



CORE MEASURES

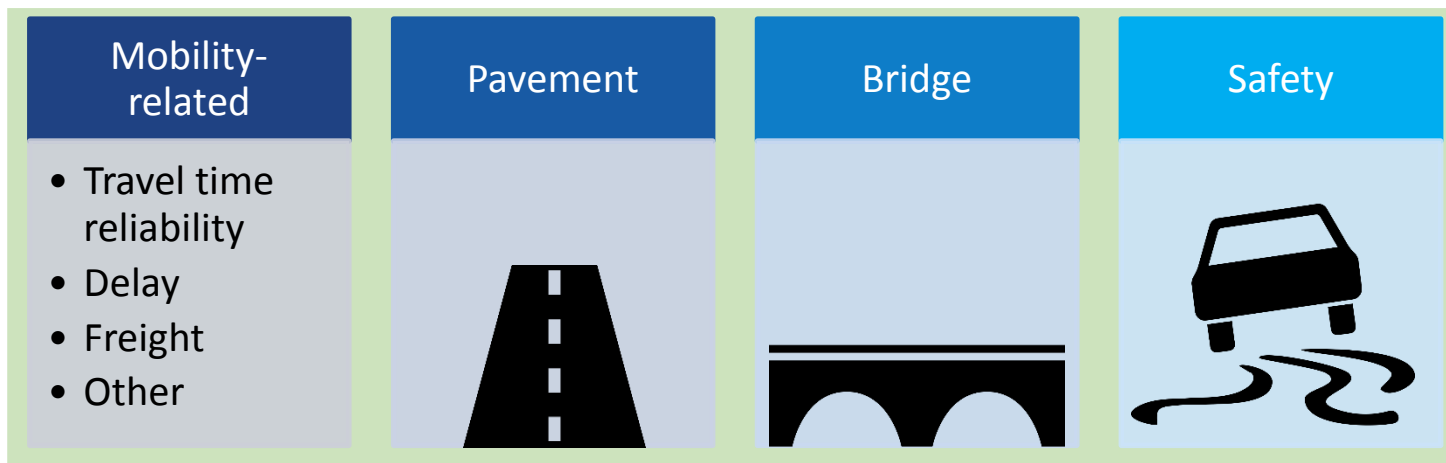
Our mobility measures
are consistent with the
Performance Report





Common Source of Data to MPOs

- Statewide meeting of FDOT/MPOs/others (April)
- MPO acquisition and reporting of MAP-21 data & for use in setting of targets



FDOT Transportation Statistics Office



Summary



Introduction to mobility



MAP-21 requirements



Consensus document

Recommended measures
Roles and responsibilities
Definitions



Recent activities / future directions